

Title (en)

Ion detection in mass spectrometry with extended dynamic range

Title (de)

IONENDETEKTION IN DER MASSENSPEKTROMETRIE MIT ERWEITERTEM DYNAMIKUMFANG

Title (fr)

DÉTECTION D'IONS EN SPECTROMÉTRIE DE MASSE AVEC UNE PLAGE DYNAMIQUE ÉLEVÉE

Publication

EP 2306491 B1 20190102 (EN)

Application

EP 10009811 A 20051011

Priority

- US 96370604 A 20041013
- EP 05809842 A 20051011
- US 2005036627 W 20051011

Abstract (en)

[origin: US2006080045A1] In a method for optimizing an ion detector a control voltage, such as in a mass spectrometry system, an array of mass scan data is acquired. Based on the size of the largest peak in the array or part of the array, a determination is made as to whether the current detector gain should be changed to a new detector gain. If the current detector gain should be changed, the control voltage for the subsequent mass scan is adjusted to a new control voltage corresponding to the new detector gain. The data are scaled based on the current detector gain. In another method, a gain versus control voltage curve is generated for calibration. These methods may be implemented by hardware, software, analog or digital circuitry, and/or computer-readable or signal-bearing media.

IPC 8 full level

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US 96370604 A 20041013; EP 05809842 A 20051011; EP 10009811 A 20051011; JP 2007536829 A 20051011; US 2005036627 W 20051011